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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,093	01/08/2002	Jon Michael Kleinberg	ARC919970008US2	6570

7590 08/09/2004

Timothy M Farrell  
IBM Corp  
Route 134 & Kitchawan Road  
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Yorktown Heights, NY 10598

EXAMINER

RONES, CHARLES

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/042,093

Applicant(s)

KLEINBERG, JON MICHAEL

Examiner

Charles Rones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-70 is/are allowed.
- 6) ☒ Claim(s) 71-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Amendment***

The amendment timely filed on May 17, 2004 has been entered.

### ***Oath/Declaration***

The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

There was no offer to surrender the patent. The original patent, or an affidavit or declaration as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Also, there was no 3.73(b) showing that IBM is the assignee of the entire interest. This makes the assent and the oath defective.

This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01.

A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 71-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Li U.S. Patent No. 5,920,859 ('Li').

Li discloses:

As to claim 71,

a computer-readable medium; See Fig. 1;

means, provided on the recording medium for directing the computer system to identify an initial set of information resources; See Figs. 2 and 5-6; 5:1-16;

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means provided on the recordings medium, for directing the computer system to define initial authoritativeness information for the initial set; See Figs. 2 and 5-6; 4:15-39;

means, provided on the recording medium for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute:

producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See 4:15-25; 8:50-62; and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See 4:15-25; 8:50-62; and

means, provided on the recording medium for directing the computer system to produce a final set of information resources based on the first and second authoritativeness information; See 4:15-25; 8:50-62.

As to claim 72,

identifying an initial set of information resources; See 4:15-25; 8:50-62;

defining initial authoritativeness information for the initial set; See 4:15-25; 8:50-62;

using the initial authoritativeness information as input authoritativeness information executing;

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producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See 4:15-25; 8:50-62 and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See 4:15-25; 8:50-62; and

producing a final set of information resources based on the first and second authoritativeness information See 4:15-25; 8:50-62.

As to claim 73,

means for identifying an initial set of information resources; See 4:15-25; 8:50-62;

means for defining initial authoritativeness information for the initial set; See 4:15-25; 8:50-62;

means for using the initial authoritativeness information as input authoritativeness information to execute; See 4:15-25; 8:50-62;

producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See 4:15-25; 8:50-62 and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See 4:15-25; 8:50-62 and

means for producing a final set of information resources based on the first and second authoritativeness information See 4:15-25; 8:50-62.

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As to claim 74,

identifying an initial set of web pages; See 4:15-25; 8:50-62;

computing authoritativeness values for web pages in said initial set of web pages based on links between said web pages in said initial set of web pages and other other web pages; See 4:15-25; 8:50-62;

identifying a set of authoritative web pages based on said authoritativeness values; See 4:15-25; 8:50-62;

As to claim 75,

identifying an initial set of web pages comprising web pages selected based on a keyword based query, web pages which link to said web pages selected based on said key-word based query and web pages which are linked to from said web pages selected based on said key-word based query; See 4:15-25; 8:50-62;

computer authoritativeness values for said web pages in said initial set of web pages; See 4:15-25; 8:50-62;

and

identifying a set of authoritative web pages based on said authoritativeness values; See 4:15-25; 8:50-62.

Claims 71-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Page U.S. Patent No. 6,285,999 ('Page').



Page discloses:

As to claim 71,

a computer-readable medium; See 7:56-64;

means, provided on the recording medium for directing the computer system to identify an initial set of information resources; See 7:56-64; 8:55-56;

means provided on the recordings medium, for directing the computer system to define initial authoritativeness information for the initial set; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41;

means, provided on the recording medium for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute:

producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; and

means, provided on the recording medium for directing the computer system to produce a final set of information resources based on the first and second authoritativeness information; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41.

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As to claim 72,

identifying an initial set of information resources; See Fig. 3; 4:5-49; 6:11-55;  
7:23-55; 8:10-41;

defining initial authoritativeness information for the initial set; See Fig. 3; 4:5-49;  
6:11-55; 7:23-55; 8:10-41;

using the initial authoritativeness information as input authoritativeness  
information executing:

producing first authoritativeness information about a set of information resources  
pointed to by links in resources of the input set; See Fig. 3; 4:5-49; 6:11-55; 7:23-55;  
8:10-41; and

producing second authoritativeness information about a set of information  
resources having links that point to resources of the input set; See Fig. 3; 4:5-49; 6:11-  
55; 7:23-55; 8:10-41; and

producing a final set of information resources based on the first and second  
authoritativeness information; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41;.

As to claim 73,

means for identifying an initial set of information resources; See Fig. 3; 4:5-49;  
6:11-55; 7:23-55; 8:10-41;

means for defining initial authoritativeness information for the initial set; See Fig.  
3; 4:5-49; 6:11-55; 7:23-55; 8:10-41;

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means for using the initial authoritativeness information as input authoritativeness information to execute; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; and producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; and means for producing a final set of information resources based on the first and second authoritativeness information; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41;.

As to claim 74,

identifying an initial set of web pages; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; computing authoritativeness values for web pages in said initial set of web pages based on links between said web pages in said initial set of web pages and other other web pages; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; identifying a set of authoritative web pages based on said authoritativeness values; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41.

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As to claim 75,

identifying an initial set of web pages comprising web pages selected based on a keyword based query, web pages which link to said web pages selected based on said key-word based query and web pages which are linked to from said web pages selected based on said key-word based query; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41;

computer authoritativeness values for said web pages in said initial set of web pages; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41; and

identifying a set of authoritative web pages based on said authoritativeness values; See Fig. 3; 4:5-49; 6:11-55; 7:23-55; 8:10-41.

Claims 71-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. U.S. Patent No. 5,875,446 ('Brown').

Brown discloses:

As to claim 71,

a computer-readable medium; See 6:12-25;

means, provided on the recording medium for directing the computer system to identify an initial set of information resources; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

means provided on the recordings medium, for directing the computer system to

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define initial authoritativeness information for the initial set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

means, provided on the recording medium for directing the computer system to use the initial authoritativeness information as input authoritativeness information, to execute:

producing first authoritativeness information about a set of information

resources pointed to by links in resources of the input set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55; and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55; and

means, provided on the recording medium for directing the computer system to produce a final set of information resources based on the first and second authoritativeness information; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55.

As to claim 72,

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identifying an initial set of information resources; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

defining initial authoritativeness information for the initial set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

using the initial authoritativeness information as input authoritativeness information executing; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55; and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55; and

producing a final set of information resources based on the first and second authoritativeness information; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55.

As to claim 73,

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means for identifying an initial set of information resources; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

means for defining initial authoritativeness information for the initial set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

means for using the initial authoritativeness information as input authoritativeness information to execute; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

producing first authoritativeness information about a set of information resources pointed to by links in resources of the input set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55; and

producing second authoritativeness information about a set of information resources having links that point to resources of the input set; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55; and

means for producing a final set of information resources based on the first and second authoritativeness information; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55.

As to claim 74,

identifying an initial set of web pages; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

computing authoritativeness values for web pages in said initial set of web pages based on links between said web pages in said initial set of web pages and other other web pages; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

identifying a set of authoritative web pages based on said authoritativeness values; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55.

As to claim 75,

identifying an initial set of web pages comprising web pages selected based on a keyword based query, web pages which link to said web pages selected based on said key-word based query and web pages which are linked to from said web pages selected based on said key-word based query; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

computer authoritativeness values for said web pages in said initial set of web pages; See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55;

and



identifying a set of authoritative web sites based on said authoritativeness values;  
See Fig. 6; Abstract; 3:48-67; 4:1-50; 5:4-38; 6:30-67; 7:2-11 and 56-67; 8:20-56; 9:50-65; 10:15-41; 13:40-6; 14:45-55.

### ***Response to Arguments***

Applicant's arguments filed May 17, 2004 have been fully considered but they are not persuasive.

Applicant primarily argues that each claim limitation is not disclosed by the cited reference.

In response, Examiner maintains that the cited references disclose the limitations.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles L. Rones whose telephone number is 703-306-3030. The examiner can normally be reached on Monday-Thursday 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.



**Charles Rones**  
**Primary Examiner**  
**Art Unit 2175**

August 3, 2004